WebBLAST

National Human Genome Research Institute

For WebBLAST support, e-mail: Webblast@nhgri.nih.gov

Quick Reference Guide - Using WebBLAST

To Use WebBLAST (see detailed instructions below):

Before you use WebBLAST for the first time, the Site Administrator will need to provide you with a User Name and Password, and assign you to a Project and Group. You must install the Sequence Uploader on your computer (for installation instructions, see http://research.nhgri.nih.gov/webblast/client/). For additional assistance, NHGRI users can contact Lan Support.

1. Login.
2. Change Password (if this is the first login).
3. Add a subproject.
4. Associate group with subproject.
5. Setup a subproject.
6. Upload sequence.
7. Select a project and subproject.
8. Check sequence and BLAST status.
9. Retrieve data.
10. ReBLAST as needed.

Note: The Admin link and associated functions are available only to users who have the Administrator or Site-Admin privilege.

Login:

1. Enter the URL for the WebBLAST CGI in your web browser (for NHGRI users, enter: http://hercules2.nhgri.nih.gov/webblast).
2. Enter your User Name and Password.
3. Select Login.

Change Password:

1. Login to WebBLAST.
2. Select the Change Password link.
3. Enter the User Name, Current Password, New Password, and Retype New Password.
4. Select Change Password.

To Add a Subproject:

1. Login to WebBLAST.
2. Select the Admin link.
3. Select Add Subproject from the Administration Menu.
4. Enter the Subproject Name.
5. Select a Project to associate the subproject to from the drop-down list.
6. Select Add Subproject.

To Associate Groups with Subprojects:

1. Login to WebBLAST.
2. Select the Admin link.
3. Select Manage Groups from the Administration Menu.
4. Select the appropriate Project :: Group from the drop-down list.
5. Select Associate Group with Subprojects from the Action drop-down list.
6. Select Manage Group.
7. Highlight the appropriate subprojects that you wish to associate with the group from the Subprojects list and move them to the "Group Name" Group list by using the right arrow .

To Setup a Subproject:

1. Login to WebBLAST.
2. Select the Admin link.
3. Select Setup Subproject from the Administration Menu.
4. Select the Project :: Subproject from the drop-down list.
5. To setup BLAST and filters, select BLAST & Filters from the Action drop-down list. Note: WebBLAST requires a BLAST configuration in order to run. At minimum, you must select a BLAST program and database. If the "month" database is selected, all sequences will be requeued for BLASTing every 30 days.
6. To setup masks, select Masks from the Action drop-down list.
7. Select Setup Subproject.
8. Enter the data in the fields as necessary.
9. For BLAST and Filters, select Save Configuration.
10. For masks, select Add to Configuration.
11. To remove a configuration, place a check in the check box to the left of the configuration and select Remove Selected Configuration.

Note: You can define as many BLASTs & Filters and Masks as you desire, as long as you use different combinations of BLAST programs and databases.

To Upload Sequences (using the Sequence Uploader):

1. Open the Sequence Uploader program.
2. Select Add File.
3. Select the sequence or directory and select Open.
4. Select Submit.
5. Enter your WebBLAST User Name and Password on the Login screen.
6. Select OK.
7. Select the appropriate project from the drop-down list and select OK.
8. Select the appropriate subproject from the drop-down list and select OK.
9. Select Quit to end the Sequence Uploader session.

Select a Project and Subproject:
1. Login to WebBLAST.
2. Select a Project from the drop-down list.
3. Select Enter Project.
4. Select a Subproject from the drop-down list, and/or
5. Enter a Sample Name (entering both the Subproject and Sample Name filters the search for data).

Retrieving Data:
1. Login to WebBLAST.
2. Select a Project.
3. Select a Subproject and/or enter a Sample Name.
4. Select Retrieve Data.
5. To review the results for a particular sample, select the "sample name" link.

To ReBLAST all Sequences within a Subproject:
Note: *ReBLASTing all sequences is computationally intensive. Ensure that you want to reBLAST all sequences before performing this step.*
1. Login to WebBLAST.
2. Select the Admin link.
3. Select Setup ReBLASTs from the Administration Menu.
4. Select a Project :: Subproject to reBLAST from the drop-down menu.
5. Deselect the Select Individual Sequences check box, if already checked.
6. Select the reBLAST button.
Note: *If the "month" database is selected, all sequences will be requeued for BLASTing every 30 days.*

To Review Retired BLASTs and Sequences:
1. Login to WebBLAST.
2. Select a Project and a Subproject and/or enter a Sample Name.
3. Select Retrieve Data.
4. Select the "sample name" link for the results you wish to view.
5. Select the View Retired BLAST link or the View Retired Sequence link (the links are available only if a retired BLAST or retired sequence exists).
6. Select the link of the retired BLAST or sequence you wish to view.

To Save the SCF or ABI Trace:
1. Login to WebBLAST.
2. Select a Project.
3. Select a Subproject and/or enter a Sample Name.
4. Select Retrieve Data.
5. Select the "sample name" link for the results you wish to view.
6. Select the Save SCF Trace button or the Save ABI Trace button.
Windows:
7. Select the Save this File to Disk button. Select OK.
8. Select the file directory in which you wish to save the trace by using the Save in: drop-down list.
9. Enter the name of the trace file and select Save.
Mac:
11. Select Save File.
12. Select the file directory where you wish to save the trace file.
13. Enter the name of the file in the Save this document as: text box and select Save.

Checking Sequence and BLAST Status:
1. Login to WebBLAST.
2. Select a Project.
3. Select a Subproject and/or enter a Sample Name.
4. Select Check Status.
5. To display the results for a particular sample, select the associated "sample name" link.
Note: For the "sample name" link to be active, the BLAST status must be "finished".

To ReBLAST Individual Sequences Within a Subproject:
1. Login to WebBLAST.
2. Select the Admin link.
3. Select Setup ReBLASTs from the Administration Menu.
4. Select a Project :: Subproject to reBLAST from the drop-down menu.
5. Check the Select Individual Sequences check box, if not checked already.
6. Select the reBLAST button.
7. Highlight the sequences you wish to reBLAST.
8. Select ReBLAST.
Note: *If the "month" database is selected, all sequences will be requeued for BLASTing every 30 days.*

To View BLAST Reports:
1. Login to WebBLAST.
2. Select a Project and a Subproject and/or enter a Sample Name.
3. Select Retrieve Data.
4. Select the "sample name" link for the results you wish to view.
5. Select the sample_name.database.BLAST_program link to see the entire BLAST report.
6. To access the BLAST alignment for a specific sequence, select the "sequence name" link on the Results for 'Sample Name' screen.

Launching the Trace Viewer:
Note: The Launch Trace Viewer button is only displayed if a trace was uploaded with the sequence data.
1. Login to WebBLAST.
2. Select a Project.
3. Select a Subproject and/or enter a Sample Name.
4. Select Retrieve Data.
5. Select the "sample name" link for the results you wish to view.
6. Select Launch Trace Viewer.
7. To view the number of data points, select the Data button.
8. To close the Trace Viewer, select the Hide or Close button.
9. If you adjusted the view on the Trace Viewer, select the Reset button to return to the default display.

To Save the Sequence Data Locally:
1. Login to WebBLAST.
2. Select a Project.
3. Select a Subproject and/or enter a Sample Name.
4. Select Retrieve Data.
5. Select the "sample name" link for the results you wish to view.
6. Select the Save Sequence or Save Masked Sequence button.
7. Follow the dialogs for Windows and Mac to save the sequence to a file directory.